

Amendment to the Claims

1-20 (canceled)

21. (new) A method for communication by a host computer that is connectable to a network by an intelligent network interface, the method comprising:

establishing a Transmission Control Protocol (TCP) connection by a central processing unit (CPU) of the host, the TCP connection being at least in part identified by an Internet Protocol (IP) address and TCP port of the host, and an IP address and TCP port of a remote host; and

transferring the TCP connection to the intelligent network interface.

22. (new) The method of claim 21, wherein the steps of establishing and transferring are performed by a protocol processing stack executing on the CPU.

23. (new) The method of claim 21, wherein the intelligent network interface includes a specialized network interface card and a device driver that passes the TCP connection to the specialized network interface card.

24. (new) The method of claim 23, further comprising:

transferring control of the TCP connection from the specialized network interface card to the CPU.

25. (new) The method of claim 24, further comprising:

initiating, by the CPU, the transferring control of the TCP connection from the specialized network interface card to the CPU.

26. (new) The method of claim 21, further comprising:

performing, by the network interface, TCP processing on a packet corresponding to the TCP connection.

27. (new) The method of claim 21, further comprising:
processing, by the network interface, a packet containing data and a TCP header corresponding to the TCP connection; and
storing, by the network interface, the data without the TCP header in a destination in the host that is associated with the TCP port of the host.
28. (new) A method for communication by a host computer that is connectable to a network by an intelligent network interface, the method comprising:
establishing a Transmission Control Protocol (TCP) connection by a protocol processing stack of the host computer, the TCP connection being at least in part identified by an Internet Protocol (IP) address and TCP port of the host, and an IP address and TCP port of a remote host; and
transferring the TCP connection from the protocol processing stack to the intelligent network interface.
29. (new) The method of claim 28, wherein the intelligent network interface includes a specialized network interface device and its device driver, and the transferring includes passing state information for the TCP connection to the device driver.
30. (new) The method of claim 28, wherein the intelligent network interface includes a specialized network interface device and its device driver, and the transferring includes passing a data structure for the TCP connection to the device driver.
31. (new) The method of claim 28, further comprising transferring control of the TCP connection from the intelligent network interface to the protocol stack.
32. (new) The method of claim 28, wherein the TCP connection includes state information that is variable, and further comprising transferring the state information from the intelligent network interface to the protocol stack.

33. (new) A set of computer-executable instructions stored on a computer-readable medium, the set of instructions comprising:

a protocol processing stack including code to establish a Transmission Control Protocol (TCP) connection for a host having a local Internet Protocol (IP) address and a local TCP port, the TCP connection being at least in part identified by the local IP address, the local TCP port, a remote IP address and a remote TCP port; and

a set of directions to transfer the TCP connection from the protocol processing stack to an intelligent network interface for the host.

34. (new) The set of instructions of claim 33, wherein the intelligent network interface includes a specialized network interface device and a device driver for the network interface device, and the directions to transfer the TCP connection include an instruction to transfer state information of the TCP connection from the stack to the device driver.

35. (new) The set of instructions of claim 33, wherein the intelligent network interface includes a network interface device and a device driver for the network interface device, and the directions to transfer the TCP connection include an instruction to transfer a data structure including state information of the TCP connection from the stack to the device driver.

36. (new) The set of instructions of claim 33, wherein the intelligent network interface includes a network interface device and a device driver for the network interface device, and the directions to transfer the TCP connection include means for transferring state information of the TCP connection from the stack to the device driver.

37. (new) The set of instructions of claim 33, further comprising an instruction to initiate transferring control of the TCP connection from the intelligent network interface to the protocol processing stack.

38. (new) The set of instructions of claim 33, further comprising an instruction to receive state information of the TCP connection from the intelligent network interface.

39. (new) The set of instructions of claim 33, further comprising an instruction to select whether to transfer the TCP connection to the intelligent network interface.